

NPDES Permit No. IL0042412

Notice No. SKT:14032701.bah

Public Notice Beginning Date: **May 13, 2015**

Public Notice Ending Date: **June 12, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

City of Washington
301 Walnut Street
Washington, Illinois 61571

Name and Address of Facility:

Washington STP #2
End of Ernest Street
Washington, Illinois 61571
(Tazewell County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Surinder Tandon at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the City of Washington.

The length of the Permit is approximately 5 years.

The main discharge number is B01. The seven day once in ten year low flow (7Q10) of the receiving stream, Farm Creek is 0 cfs.

The design average flow (DAF) for the existing facility is 1.56 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 5.29 MGD. Treatment consists of screening, activated sludge, clarification, aerobic digestion, oxidation ditch, sand drying beds and land application of both liquid and dry sludge.

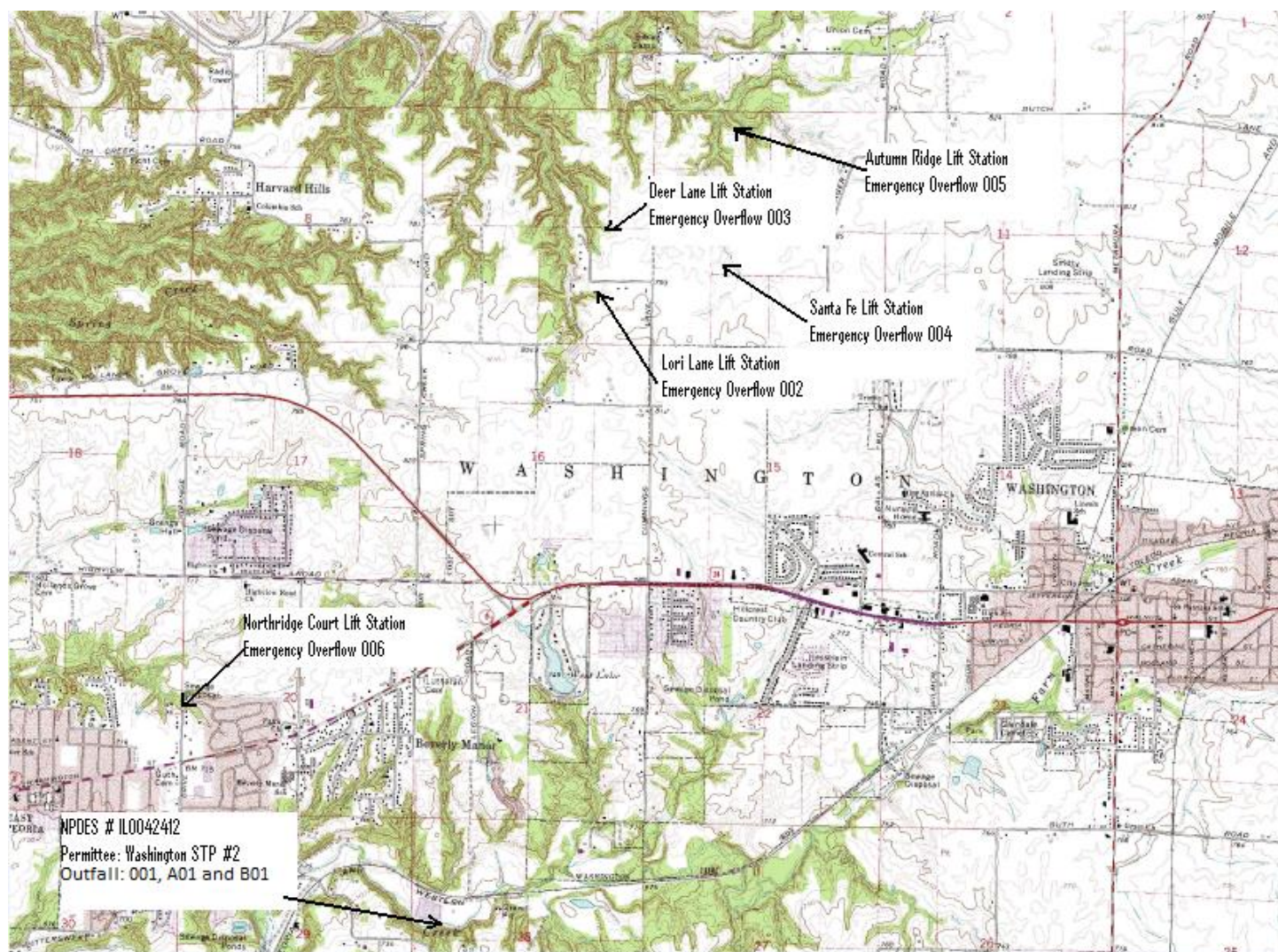
The design average flow (DAF) for the upgraded facility is 2.29 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 6.37 MGD. Treatment consists of screening, activated sludge, clarification, aerobic digestion, oxidation ditch, sand drying beds and land application of both liquid and dry sludge.

This Reissue Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

Application is made for the existing discharge(s) which are located in Tazewell County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
B01	Farm Creek	40° 41' 00" North	89° 27' 42" West	General Water Use	C
A01	Farm Creek	40° 41' 00" North	89° 27' 42" West	General Water Use	C
002	Unnamed tributary to Ten Mile Creek	40° 43' 22" North	89° 26' 59" West	General Water Use	Not Rated
003	Unnamed tributary to Ten Mile Creek	40° 43' 37" North	89° 26' 59" West	General Water Use	Not Rated
004	Unnamed tributary to Ten Mile Creek	40° 43' 35" North	89° 26' 27" West	General Water Use	Not Rated
005	Unnamed tributary to Ten Mile Creek	40° 44' 01" North	89° 26' 22" West	General Water Use	Not Rated

To assist you further in identifying the location of the discharge(s) please see the attached map.



Farm Creek, waterbody segment, DZZP-03, receiving discharge from outfall(s) B01 and A01, is listed on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) list as impaired.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): B01 STP Outfall

Load limits computed based on a design average flow (DAF) of 1.56 MGD (design maximum flow (DMF) of 5.29 MGD).

From the effective date of this Permit until the attainment of operational level of the upgraded plant, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Regulation
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD ₅	130 (441)		260 (882)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	156 (529)		312 (1059)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March-May/Sept.-Oct.	7 (22)	17 (57)	17 (57)	0.5	1.3	1.3	35 IAC 355 and 35 IAC 302
June-August	7 (22)	17 (57)	35 (119)	0.5	1.3	2.7	
Nov.-Feb.	43 (146)		51 (172)	3.3		3.9	
Total Phosphorus (as P)	13(44)			1.0			35 IAC 304.123
Total Nitrogen	Monitor only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): B01 STP Outfall

Load limits computed based on a design average flow (DAF) of 2.29 MGD (design maximum flow (DMF) of 6.37 MGD) or by adding load limits from the existing STP #2 and STP #1 NPDES Permits, whichever is more stringent.

From the attainment of operational level of the upgraded plant until the expiration date, the effluent of the above discharge(s) shall be monitored and limited as follows:

Parameter	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			Regulation
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD ₅ **	180 (491)		360 (982)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	216 (589)		432 (1179)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
Ammonia Nitrogen: March-May/Sept.-Oct.	9.5 (26.5)	25 (69)	25 (69)	0.5	1.3	1.3	35 IAC 355 and 35 IAC 302
June-August	9.5 (26.5)	25 (69)	50 (134)	0.5	1.3	2.7	
Nov.-Feb.	62 (165)		73 (194)	3.3		3.9	
Total Phosphorus (as P)	19 (53)			1.0			35 IAC 304.123
Total Nitrogen	Monitor only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$

**BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105.

The following parameters have been identified as the pollutants causing impairment:

<u>Potential Causes</u>	<u>Uses Impaired</u>
Alteration in stream-side or littoral vegetative cover (non-Pollutant), chloride, loss of instream cover (non-pollutant), dissolved oxygen (non-pollutant), pH, phosphorus, and total suspended solids (TSS)	Aquatic life use

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): A01 Excess Flow Outfall (Flow in excess of 3674 GPM for the existing plant and 4424 GPM for upgraded plant)

	<u>CONCENTRATION LIMITS (mg/L)</u>			
<u>Parameter</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily maximum</u>	<u>Regulation</u>
Fecal Coliform	Daily Maximum shall not Exceed 400 per 100 mL			35 IAC 304.121
BOD ₅	Monitor Only			35 IAC 309.146
Suspended Solids	Monitor Only			35 IAC 309.146
Ammonia Nitrogen (as N)	Monitor Only			35 IAC 309.146
Total Phosphorus (as P)	Monitor Only			35 IAC 309.146

Discharge Number(s) and Name(s): Combined Discharge from A01 and B01 Outfall Discharge Number(s) and Name(s): 001 Combined Discharge from A01 and B01 Outfall

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	<u>CONCENTRATION LIMITS (mg/L)</u>			
<u>Parameter</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Regulation</u>
BOD ₅	30	45		40 CFR 133.102
Suspended Solids	30	45		40 CFR 133.102
pH	Shall be in the range of 6 to 9 standard units			35 IAC 304.125
Chlorine Residual	0.75			35 IAC 302.208
Ammonia Nitrogen (as N)	Monitor Only			35 IAC 309.146
Total Phosphorus (as P)	Monitor Only			35 IAC 309.146
Dissolved Oxygen	Monitor Only			35 IAC 309.146

This draft Permit also contains the following requirements as special conditions:

1. Reopening of this Permit to include different final effluent limitations.
2. Operation of the facility by or under the supervision of a certified operator.
3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
5. Prohibition against causing or contributing to violations of water quality standards.
6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
8. Effluent sampling point location.
9. At minimum of 85% removal of CBOD₅ and suspended solids.
10. Controlling the sources of infiltration and inflow into the sewer system.
11. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used.
12. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, weak acid dissociable cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required to be conducted semi-annually beginning 3 months from the effective date.
13. Submission of annual fiscal data.
14. A requirement for biomonitoring of the effluent.
15. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
16. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
17. Reasonable potential to cause exceedances of water quality standards by combined discharges.
18. Submission of Capacity, Management, Operation and Maintenance (CMOM) plan.
19. Conditional authorization to discharge from high level emergency bypass(es) based on 40 CFR.
20. A requirement to notify the IEPA for the treatment plant expansion.
21. Monitoring for Total Nitrogen.
22. Phosphorus Removal Technology.
23. Nutrient Loss Reduction Feasibility Plan.

NPDES Permit No. IL0042412

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

City of Washington
301 Walnut Street
Washington, Illinois 61571

Facility Name and Address:

Washington STP #2
End of Ernest Street
Washington, Illinois 61571
(Tazewell County)

Receiving Waters: Farm Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the Effluent Limitations, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

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Effluent Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): B01 STP Outfall

Load limits computed based on a design average flow (DAF) of 1.56 MGD (design maximum flow (DMF) of 5.29 MGD).

From the effective date of this Permit until the attainment of operational level of the upgraded plant, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

<u>Parameter</u>	<u>LOAD LIMITS lbs/day</u> <u>DAF (DMF)*</u>			<u>CONCENTRATION</u> <u>LIMITS mg/L</u>			<u>Sample</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>		
Flow (MGD)							Continuous	
CBOD ₅ ** ,***	130 (441)		260 (882)	10		20	3 Days/Week	Composite
Suspended Solids***	156 (529)		312 (1059)	12		24	3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform****	Daily Maximum shall not exceed 400 per 100 mL (May through October)						3 Days/Week	Grab
Chlorine Residual****						0.05	3 Days/Week	Grab
Ammonia Nitrogen: As (N) March-May/Sept.-Oct.	7 (22)	17 (57)	17 (57)	0.5	1.3	1.3	3 Days/Week	Composite
June-August	7 (22)	17 (57)	35 (119)	0.5	1.3	2.7	3 Days/Week	Composite
Nov.-Feb.	43 (146)		51 (172)	3.3		3.9	3 Days/Week	Composite
Total Phosphorus (as P)	13(44)			1.0			3 Days/Week	Composite
Total Nitrogen	Monitor only						1 Day/Week	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4/0	3/5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***The 30-day average percent removal shall not be less than 85%. See Special Condition 9.

****See Special Condition 11.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Phosphorus shall be reported on the DMR as a daily maximum value.

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Effluent Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): B01 STP Outfall

Load limits computed based on a design average flow (DAF) of 2.29 MGD (design maximum flow (DMF) of 6.37 MGD) or by adding load limits from the existing STP #2 and STP #1 NPDES Permits, whichever is more stringent.

From the attainment of operational level of the upgraded plant until the expiration date, the effluent of the above discharge(s) shall be monitored and limited as follows:

<u>Parameter</u>	<u>LOAD LIMITS lbs/day</u> <u>DAF (DMF)*</u>			<u>CONCENTRATION</u> <u>LIMITS mg/L</u>			<u>Sample</u> <u>Frequency</u>	<u>Sample</u> <u>Type</u>
	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>	<u>Monthly</u> <u>Average</u>	<u>Weekly</u> <u>Average</u>	<u>Daily</u> <u>Maximum</u>		
Flow (MGD)							Continuous	
CBOD ₅ ** ,***	180 (491)		360 (982)	10		20	3 Days/Week	Composite
Suspended Solids***	216 (589)		432 (1179)	12		24	3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform****	Daily Maximum shall not exceed 400 per 100 mL (May through October)						3 Days/Week	Grab
Chlorine Residual****						0.05	3 Days/Week	Grab
Ammonia Nitrogen: As (N) March-May/Sept.-Oct.	9.5 (26.5)	25 (69)	25 (69)	0.5	1.3	1.3	3 Days/Week	Composite
June-August	9.5 (26.5)	25 (69)	50 (134)	0.5	1.3	2.7	3 Days/Week	Composite
Nov.-Feb.	62 (165)		73 (194)	3.3		3.9	3 Days/Week	Composite
Total Phosphorus (as P)	19 (53)			1.0			3 Days/Week	Composite
Total Nitrogen	Monitor only						1 Day/Week	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

***The 30-day average percent removal shall not be less than 85%. See Special Condition 9.

****See Special Condition 11.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Phosphorus shall be reported on the DMR as a daily maximum value.

NPDES Permit No. IL0042412

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): Excess Flow Outfall A01 (Flow in excess of 3674 GPM for the existing plant and flows over 4424 GPM for upgraded plant)

These flow facilities shall not be utilized until the main treatment facility is receiving its design maximum flow (DMF)*.

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>			<u>Sample Frequency</u>	<u>Sample Type</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>		
Total Flow (MG)				Daily When Discharging	Continuous
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL			Daily When Discharging	Grab
BOD ₅	Monitor Only			Daily When Discharging	Grab
Suspended Solids	Monitor Only			Daily When Discharging	Grab
Ammonia Nitrogen (as N)	Monitor Only			Daily When Discharging	Grab
Total Phosphorus (as P)	Monitor Only			Daily When Discharging	Grab

*An explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 8.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly and weekly average concentration.

Ammonia Nitrogen shall be reported on the DMR as a daily maximum value.

Total Phosphorus shall be reported on the DMR as a daily maximum value.

The duration of each A01 discharge and rainfall event including rainfall intensity (i.e., start and ending time) shall be provided in the comment section of the DMR.

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 Combined Discharge from Outfalls A01 and B01

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	CONCENTRATION LIMITS (mg/L)				
<u>Parameter</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Total Flow (MG)				Daily When A01 is Discharging	Continuous
BOD ₅ *	30	45		Daily When A01 is Discharging	Grab
Suspended Solids*	30	45		Daily When A01 is Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units			Daily When A01 is Discharging	Grab
Chlorine Residual			0.75	Daily When A01 is Discharging	
Ammonia Nitrogen (as N)**	Monitor Only			Daily When Discharging	Grab
Total Phosphorus (as P)	Monitor Only			Daily When Discharging	Grab
Dissolved Oxygen	Monitor Only			Daily When Discharging	Grab

*The 30-day average percent removal shall not be less than 85 percent. See Special Condition 8.

** See Special Condition 17.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

Chlorine Residual shall be reported on the DMR as monthly average.

Ammonia Nitrogen shall be reported on the DMR as a daily maximum value.

Dissolved Oxygen shall be reported on the DMR as a daily minimum value.

Total Phosphorus shall be reported on the DMR as a daily maximum value.

A Monthly Average value for Ammonia shall be computed for each month that A01 discharges beginning one month after the effective date of the permit. A Monthly Average concentrations shall be determined by combining data collected from 001 and B01 (only B01 data from days when A01 is not discharging) for the reporting period. These monitoring results shall be submitted to the Agency on the DMR.

A Monthly and Weekly Average value for DO shall be computed for each month that A01 discharges beginning one month after the effective date of the permit. The Monthly and Weekly Averages concentrations for 001 shall be determined by combining data collected from 001 and B01 (only B01 data from days when A01 is not discharging) for the reporting period. These monitoring results shall be submitted to the Agency on the DMR.

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Influent Monitoring and Reporting

FINAL

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Continuous	
BOD ₅	3 Days/Week	Composite
Suspended Solids	3 Days/Week	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using Net-DMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code # 19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Outfalls A01 and B01 shall be sampled prior to admixture. Outfall 001 shall be sampled at a point representative of the discharge but prior to entry into the receiving stream.

SPECIAL CONDITION 9: BOD₅ and Suspended Solids (85% removal required) For Discharge No. 001 & B01: In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration.

Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

SPECIAL CONDITION 10. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 11. Fecal Coliform limits for Discharge Number B01 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

Special Conditions

SPECIAL CONDITION 12. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA.

The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET</u> <u>CODE</u>	<u>PARAMETER</u>	<u>Minimum</u> <u>reporting limit</u>
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (available *** or amenable to chlorination) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L *
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Minimum reporting limits are defined as - (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservatives, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined including all oxidation states. Where constituents are commonly measured as other than total, the phase is so indicated.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

*** USEPA Method OIA-1677.

SPECIAL CONDITION 13. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 14. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) B01.

Biomonitoring

1. Acute Toxicity - Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

- a. Fish - 96 hour static LC₅₀ Bioassay using fathead minnows (*Pimephales promelas*).
- b. Invertebrate 48-hour static LC₅₀ Bioassay using *Ceriodaphnia*.

Special Conditions

2. Testing Frequency - The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
3. Reporting - Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.
4. Toxicity - Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to \geq 50% of organisms tested in the 100% effluent treatments, the Permittee shall immediately notify IEPA in writing of the test results.
5. Toxicity Reduction Evaluation and Identification - Should the biomonitoring program identify toxicity and result in notification by IEPA, the permittee shall develop a plan for toxicity reduction evaluation and identification. The plan shall be developed and implemented in accordance with Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification of the permittee above or other such date as is received by IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 15. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Special Conditions

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-927

SPECIAL CONDITION 16. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

SPECIAL CONDITION 17. The Agency shall consider all monitoring data submitted by the discharger in accordance with the monitoring requirements of this permit for all parameters, including but not limited to data pertaining to ammonia for discharges from Discharge Number 001, to determine whether the discharges are at levels which cause, have the reasonable potential to cause, or contribute to exceedances of water quality standards. If the data indicate that the discharges are at levels which cause, have the reasonable potential to cause, or contribute to exceedances of water quality standards, then the Agency shall reopen the permit to include water quality based effluent limitations within 30 months of the effective date of this permit. If the discharger wants the Agency to consider mixing when determining the need for and establishment of water quality based effluent limitations, the discharger shall submit a study plan on mixing to the Agency for the Agency's review and comment within 2 months of the effective date of this permit.

SPECIAL CONDITION 18. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement backups and ensuring that overflows or backups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by Ill. Adm. Code 306.304. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management Strategy, within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they are designed.

The CMOM plan shall include the following elements:

a. Measures and Activities:

1. A complete map and system inventory for the collection system owned and operated by the Permittee;
2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
3. Documentation of unplanned maintenance;
4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring as necessary;
5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee; and
6. Scheduled inspections and testing.
7. The permittee shall develop and implement an Asset Management Strategy to ensure the long-term sustainability of the collection system. The Asset Management Strategy shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace, or rehabilitate particular assets and develop long-term funding strategies.
8. Asset Management Strategies shall include (as further described in the Asset Management Guidance Document), but is not limited to the following elements:
 - A. Asset Inventory and State of the Assets.
 - B. Level of Services.
 - C. Critical Asset Identification.
 - D. Life Cycle Costing.
 - E. Long-term Funding Strategies.

Special Conditions

b. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and
3. Maintain a summary of CMOM activities.

c. Overflow Response Plan:

1. Know where overflows and backups within the facilities owned and operated by the Permittee occur;
2. Respond to each overflow or backup to determine additional actions such as clean up; and
3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.

d. System Evaluation Plan:

1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
2. Evaluate plans to reduce I/I and eliminate SSOs;
3. Special provisions for Pump Stations and force mains and other unique system components; and
4. Construction plans and schedules for correction.

e. Reporting and Monitoring Requirements:

1. Program for SSO detection and reporting; and
2. Program for tracking and reporting basement back-ups, including general public complaints.

f. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to this following web site addresses. http://www.epa.gov/npdes/pubs/cmom_5.pdf, <http://www.epa.gov/npdes/pubs/assetmanagement.pdf>.

SPECIAL CONDITION 19. Discharge Numbers 002, 003, 004, and 005 are emergency high level overflow discharges. Discharges from these outfalls are prohibited. Permittee shall maintain continuous electronic monitors capable of detecting all discharges from each prohibited discharge outfall or shall inspect each listed prohibited discharge outfall listed above within 24 hours of receiving .25 inches of precipitation or greater within a 24 hour period as recorded at the nearest National Weather Service Reporting Station. Permittee shall utilize chalk or block devices or other discharge confirming devices approved by the Agency to enhance visual monitoring. These prohibited discharges, if they occur, are subject to conditions A-E listed below.

A. Definitions

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a discharge. Severe property damage does not mean economic loss caused by delays in production.

B. Notice

1. Anticipated discharge. If the Permittee knows in advance of the need for a prohibited discharge from Discharge Numbers 002, 003, 004, and 005, it shall submit prior notice, if possible at least ten days before the date of the discharge.
2. Unanticipated discharge. The Permittee shall submit notice of an unanticipated discharge as required in Standard Condition 12(f) of this Permit (24-hour notice).

C. Limitation on IEPA enforcement discretion. The IEPA may take enforcement action against a Permittee for prohibited discharges from discharge numbers 002, 003, 004, and 005, unless:

1. Discharge was unavoidable to prevent loss of life, personal injury, or severe property damage;

Special Conditions

2. There was no feasible alternatives to the discharge, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a discharge which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The Permittee submitted notices as required under Standard Condition 12(f) of this Permit.
- D. Emergency discharges when discharging, shall be monitored daily by grab sample for BOD₅, Suspended Solids and Fecal Coliform. The Permittee shall submit the monitoring results on Discharge Monitoring Report forms using one such form for each month in which discharging occurs. The Permittee shall specify the number of discharges per month that occur and shall report this number in the quantity daily maximum column. The Permittee shall report the highest concentration value of BOD₅ and Suspended Solids and Fecal Coliform discharged in the concentration daily maximum column.
- E. The above limitations on enforcement discretion apply only with respect to IEPA. They do not serve as a limitation on the ability of any other governmental agency or person to bring an enforcement action in accordance with the Federal Clean Water Act.

SPECIAL CONDITION 20. The Permittee shall notify the IEPA in writing once the treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 21. The Permittee shall operate the expanded facilities designed for biological nutrient removal (BNR). Monitoring for Total Nitrogen is required to document the actual total nitrogen effluent concentration. Once the plant expansion becomes operational, the Permittee shall monitor the effluent for total nitrogen once per week. The monitoring shall be a composite sample and the results reported as a daily maximum on the Permittee's Discharge Monitoring Forms.

The Permittee shall notify the IEPA in writing of any operational deficiencies and corrective measures that are operational in nature to be taken if the treatment plant exceeds the average monthly goal concentration value of 10 mg/L of Total Nitrogen in the effluent. Correspondence shall be directed to:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62974-9276

Illinois Environmental Protection Agency
Bureau of Water
Peoria Field Office
5407 N. University St.
Arbor Hall #113
Peoria, Illinois 61614

SPECIAL CONDITION 22. The Permittee shall, within eighteen (18) months of the effective date of this permit, prepare and submit to the Agency a feasibility study that identifies the method, timeframe, and costs of reducing phosphorus levels in its discharge to a level consistently meeting a potential future effluent limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L. The study shall evaluate the construction and O & M costs of the application of these limits on a monthly, seasonal and annual average basis.

SPECIAL CONDITION 23. The Permittee shall develop and submit to the Agency a Phosphorus Discharge Optimization Plan within eighteen (18) months of the effective date of this permit. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

- A. WWTF influent reduction measures.
 1. Evaluate the phosphorus reduction potential of users.
 2. Determine which sources have the greatest opportunity for reducing phosphorus (i.e., industrial, commercial, institutional, municipal and others).

Special Conditions

- a. Determine whether known sources (i.e., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
 - b. Evaluate and implement local limits on influent sources of excessive phosphorus.
- B. WWTF effluent reduction measures.
1. Reduce phosphorus discharges by optimizing existing treatment processes.
 - a. Adjust the solids retention time for nitrification, denitrification, or biological phosphorus removal.
 - b. Adjust aeration rates to reduce dissolved oxygen and promote simultaneous nitrification-denitrification.
 - c. Add baffles to existing units to improve microorganism conditions by creating divided anaerobic, anoxic, and aerobic zones.
 - d. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
 - e. Minimize impact on recycle streams by improving aeration within holding tanks.
 - f. Reconfigure flow through existing basins to enhance biological nutrient removal.
 - g. Increase volatile fatty acids for biological phosphorus removal.

